



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/511,415

Source: PT/10

Date Processed by STIC: 10/25/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/511,415

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.

- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000

- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



PCT

RAW SEQUENCE LISTING

DATE: 10/25/2004

PATENT APPLICATION: US/10/511,415

TIME: 16:56:26

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\10252004\J511415.raw

3 <110> APPLICANT: Imperial College Innovations Limited
5 <120> TITLE OF INVENTION: Methods
7 <130> FILE REFERENCE: ICOY/P28304PC
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/511,415
C--> 10 <141> CURRENT FILING DATE: 2004-10-14
12 <150> PRIOR APPLICATION NUMBER: PCT/GB03/01625
13 <151> PRIOR FILING DATE: 2003-04-15
15 <160> NUMBER OF SEQ ID NOS: 30
17 <170> SOFTWARE: PatentIn version 3.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 400
21 <212> TYPE: PRT
22 <213> ORGANISM: Homo sapiens
24 <400> SEQUENCE: 1
26 Met Met Asp Leu Arg Asn Thr Pro Ala Lys Ser Leu Asp Lys Phe Ile
27 1 5 10 15
30 Glu Asp Tyr Leu Leu Pro Asp Thr Cys Phe Arg Met Gln Ile Asp His
31 20 25 30
34 Ala Ile Asp Ile Ile Cys Gly Phe Leu Lys Glu Arg Cys Phe Arg Gly
35 35 40 45
38 Ser Ser Tyr Pro Val Cys Val Ser Lys Val Val Lys Gly Gly Ser Ser
39 50 55 60
42 Gly Lys Gly Thr Thr Leu Arg Gly Arg Ser Asp Ala Asp Leu Val Val
43 65 70 75 80
46 Phe Leu Ser Pro Leu Thr Thr Phe Gln Asp Gln Leu Asn Arg Arg Gly
47 85 90 95
50 Glu Phe Ile Gln Glu Ile Arg Arg Gln Leu Glu Ala Cys Gln Arg Glu
51 100 105 110
54 Arg Ala Leu Ser Val Lys Phe Glu Val Gln Ala Pro Arg Trp Gly Asn
55 115 120 125
58 Pro Arg Ala Leu Ser Phe Val Leu Ser Ser Leu Gln Leu Gly Glu Gly
59 130 135 140
62 Val Glu Phe Asp Val Leu Pro Ala Phe Asp Ala Leu Gly Gln Leu Thr
63 145 150 155 160
66 Gly Ser Tyr Lys Pro Asn Pro Gln Ile Tyr Val Lys Leu Ile Glu Glu
67 165 170 175
70 Cys Thr Asp Leu Gln Lys Glu Gly Glu Phe Ser Thr Cys Phe Thr Glu
71 180 185 190
74 Leu Gln Arg Asp Phe Leu Lys Gln Arg Pro Thr Lys Leu Lys Ser Leu
75 195 200 205
78 Ile Arg Leu Val Lys His Trp Tyr Gln Asn Cys Lys Lys Leu Gly
79 210 215 220
82 Lys Leu Pro Pro Gln Tyr Ala Leu Glu Leu Leu Thr Val Tyr Ala Trp

pp 3-5
Does Not Comply
Corrected Diskette Needed

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Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\10252004\J511415.raw

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83 225          230          235          240
86 Glu Arg Gly Ser Met Lys Thr His Phe Asn Thr Ala Gln Gly Phe Arg
87          245          250          255
90 Thr Val Leu Glu Leu Val Ile Asn Tyr Gln Gln Leu Cys Ile Tyr Trp
91          260          265          270
94 Thr Lys Tyr Tyr Asp Phe Lys Asn Pro Ile Ile Glu Lys Tyr Leu Arg
95          275          280          285
98 Arg Gln Leu Thr Lys Pro Arg Pro Val Ile Leu Asp Pro Ala Asp Pro
99          290          295          300
102 Thr Gly Asn Leu Gly Gly Gly Asp Pro Lys Gly Trp Arg Gln Leu Ala
103 305          310          315          320
106 Gln Glu Ala Glu Ala Trp Leu Asn Tyr Pro Cys Phe Lys Asn Trp Asp
107          325          330          335
110 Gly Ser Pro Val Ser Ser Trp Ile Leu Leu Ala Glu Ser Asn Ser Thr
111          340          345          350
114 Asp Asp Glu Thr Asp Asp Pro Arg Thr Tyr Gln Lys Tyr Gly Tyr Ile
115          355          360          365
118 Gly Thr His Glu Tyr Pro His Phe Ser His Arg Pro Ser Thr Leu Gln
119          370          375          380
122 Ala Ala Ser Thr Pro Gln Ala Glu Glu Asp Trp Thr Cys Thr Ile Leu
123 385          390          395          400

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126 <210> SEQ ID NO: 2

127 <211> LENGTH: 1590

128 <212> TYPE: DNA

129 <213> ORGANISM: Homo sapiens

131 <400> SEQUENCE: 2

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132 gaggcagttc tgttgccact ctctctcctg tcaatgatgg atctcagaaa taccocagcc 60
134 aaatctctgg acaagttcat tgaagactat ctcttgccag acacgtgttt ccgcatgcaa 120
136 atcgaccatg ccattgacat catctgtggg ttctgaagg aaaggtgctt ccgaggtagc 180
138 tcctaccctg tgtgtgtgtc caaggtggta aaggtggct cctcaggcaa gggcaccacc 240
140 ctcagaggcc gatctgacgc tgacctggtt gtcttctca gtctctcac cacttttcag 300
142 gatcagttaa atcgccgggg agagttcatc caggaaatta ggagacagct ggaagcctgt 360
144 caaagagaga gacactttc cgtgaagttt gaggtccagg ctccacgctg gggcaacccc 420
146 cgtgcgctca gcttcgtact gagttcgctc cagctcgggg agggggtgga gttcgatgtg 480
148 ctgcctgcct ttgatgccct gggtcagttg actggcagct ataaacctaa ccccaaatc 540
150 tatgtcaagc tcatcgagga gtgcaccgac ctgcagaaag agggcgagtt ctccacctgc 600
152 ttcacagaac tacagagaga cttcctgaag cagcgcccca ccaagctcaa gacgctcatc 660
154 cgcttagtca agcactggta ccaaaattgt aagaagaagc ttgggaagct gccacctcag 720
156 tatgccctgg agctcctgac ggtctatgct tgggagcgag ggagcatgaa aacacatttc 780
158 aacacagccc aaggatttcg gacggtcttg gaattagtca taaactacca gcaactctgc 840
160 atctactgga caaagtatta tgactttaaa aacccatta ttgaaaagta cctgagaagg 900
162 cagctcacga aacccaggcc tgtgatcctg gacccggcgg accctacagg aaacttgggt 960
164 ggtggagacc caaaggggtg gaggcagctg gcacaagagg ctgaggcctg gctgaattac 1020
166 catgcttta agaattggga tgggtcccca gtgagctcct ggattctgct ggctgaaagc 1080
168 aacagtacag acgatgagac cgacgatccc aggacgtatc agaaatatgg ttacattgga 1140
170 acacatgagt accctcattt ctctcataga ccagcacgc tccaggcagc atccacccca 1200
172 caggcagaag aggactggac ctgcaccatc ctctgaatgc cagtgcattt tgggggaaag 1260
174 ggtccagtg ttatctggac cagttccttc attttcaggt gggactcttg atccagagaa 1320
176 gacaaagctc ctcagtgagc tgggtgtataa tccaagacag aacccaagtc tctgactcc 1380

```

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Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\10252004\J511415.raw

178 tggccttcta tggcctctat cctatcatag ataacattct ccacagcctc acttcattcc 1440
 180 acctattctc tgaaaatatt ccctgagaga gaacagagag atttagataa gagaatgaaa 1500
 182 ttccagcctt gactttcttc tgtgcacctg atgggagggt aatgtctaata gtattatcaa 1560
 184 taacaataaaa aataaagcaa ataccaaaaa 1590
 187 <210> SEQ ID NO: 3
 188 <211> LENGTH: 20
 189 <212> TYPE: DNA
 190 <213> ORGANISM: PCR primer
 192 <400> SEQUENCE: 3
 193 ctcaactgagg agctttgtct 20
 196 <210> SEQ ID NO: 4
 197 <211> LENGTH: 18
 198 <212> TYPE: DNA
 199 <213> ORGANISM: PCR primer
 201 <400> SEQUENCE: 4
 202 cactgaggag ctttgtcc 18
 205 <210> SEQ ID NO: 5
 206 <211> LENGTH: 21
 207 <212> TYPE: DNA
 208 <213> ORGANISM: PCR primer
 210 <400> SEQUENCE: 5
 211 caggtgggac tcttgatcca g 21
 214 <210> SEQ ID NO: 6
 215 <211> LENGTH: 20
 216 <212> TYPE: DNA
 217 <213> ORGANISM: PCR primer
 219 <400> SEQUENCE: 6
 220 agggttcctg gccgtgcagg 20
 223 <210> SEQ ID NO: 7
 224 <211> LENGTH: 18
 225 <212> TYPE: DNA
 226 <213> ORGANISM: PCR primer
 228 <400> SEQUENCE: 7
 229 ccgcgctccc tcggctgc 18
 232 <210> SEQ ID NO: 8
 233 <211> LENGTH: 20
 234 <212> TYPE: DNA
 235 <213> ORGANISM: PCR primer
 237 <400> SEQUENCE: 8
 238 atattctctt tgtaatcagg 20
 241 <210> SEQ ID NO: 9
 242 <211> LENGTH: 20
 243 <212> TYPE: DNA
 244 <213> ORGANISM: PCR primer
 246 <400> SEQUENCE: 9
 247 aaaaatggca atcactcacc 20
 250 <210> SEQ ID NO: 10
 251 <211> LENGTH: 20
 252 <212> TYPE: DNA

Invalid <2137 response
 (see item 10 on Error Summary Sheet)

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Input Set : A:\PTO.FG.txt

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253 <213> ORGANISM: PCR primer
255 <400> SEQUENCE: 10
256 ccttctatga tttctcctag 20
259 <210> SEQ ID NO: 11
260 <211> LENGTH: 20
261 <212> TYPE: DNA
262 <213> ORGANISM: PCR primer
264 <400> SEQUENCE: 11
265 atccaaaggc aatacgtacc 20
268 <210> SEQ ID NO: 12
269 <211> LENGTH: 20
270 <212> TYPE: DNA
271 <213> ORGANISM: PCR primer
273 <400> SEQUENCE: 12
274 acagtgtttt atctttaagg 20
277 <210> SEQ ID NO: 13
278 <211> LENGTH: 21
279 <212> TYPE: DNA
280 <213> ORGANISM: PCR primer
282 <400> SEQUENCE: 13
283 gtaacattta ctacttactc g 21
286 <210> SEQ ID NO: 14
287 <211> LENGTH: 20
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289 <213> ORGANISM: PCR primer
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295 <210> SEQ ID NO: 15
296 <211> LENGTH: 20
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298 <213> ORGANISM: PCR primer
300 <400> SEQUENCE: 15
301 ctcaggatca taatcactgc 20
304 <210> SEQ ID NO: 16
305 <211> LENGTH: 20
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307 <213> ORGANISM: PCR primer
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310 ctgtgaattt tatacccagg 20
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314 <211> LENGTH: 21
315 <212> TYPE: DNA
316 <213> ORGANISM: PCR primer
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319 gtattacttt ttccacttac c 21
322 <210> SEQ ID NO: 18
323 <211> LENGTH: 20
324 <212> TYPE: DNA
325 <213> ORGANISM: PCR primer

RAW SEQUENCE LISTING

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TIME: 16:56:26

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\10252004\J511415.raw

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328 gactctcact gtcattgcag                                     20
331 <210> SEQ ID NO: 19
332 <211> LENGTH: 20
333 <212> TYPE: DNA
334 <213> ORGANISM: PCR primer
336 <400> SEQUENCE: 19
337 gtgtcattgc actccagcct                                     20
340 <210> SEQ ID NO: 20
341 <211> LENGTH: 624
342 <212> TYPE: DNA
343 <213> ORGANISM: Homo sapiens
345 <400> SEQUENCE: 20
346 ggatccagat ggcattgcac agtataactaa atgctcactg aatccagctg caatgcagga      60
348 agactcccct gatgtgatca tgtgtctcac cctttcaggc tgaaagcaac agtacagacg      120
350 atgagaccga cgatcccagg acgtatcaga aatatgggta cattggaaca catgagtacc      180
352 ctcatcttctc tcatagaccc agcacgctcc aggcagcatc caccacacag gcagaagagg      240
354 actggacctg caccatcctc tgaatgccag tgcattcttg gggaaagggc tccagtgtta      300
356 tctggaccag ttcttctcatt ttcagggtggg actcttgatc cagagaagac aaagctcctc      360
358 agtgagctgg tgtataatcc aagacagaac ccaagtctcc tgactcctgg ctttctatgc      420
360 cctctatcct atcatagata acattctcca cagcctcact tcattccacc tattctctga      480
362 aaatattccc tgagagagaa cagagagatt tagataagag aatgaaattc cagccttgac      540
364 tttcttctgt gcacctgatg ggagggtaat gtctaataa ttatcaataa caataaaaat      600
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370 <211> LENGTH: 19
371 <212> TYPE: DNA
372 <213> ORGANISM: PCR primer
374 <400> SEQUENCE: 21
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378 <210> SEQ ID NO: 22
379 <211> LENGTH: 19
380 <212> TYPE: DNA
381 <213> ORGANISM: PCR primer
383 <400> SEQUENCE: 22
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388 <211> LENGTH: 20
389 <212> TYPE: DNA
390 <213> ORGANISM: PCR primer
392 <400> SEQUENCE: 23
393 gctttgtgtg agcaacatgg
396 <210> SEQ ID NO: 24
397 <211> LENGTH: 20
398 <212> TYPE: DNA
399 <213> ORGANISM: PCR primer
401 <400> SEQUENCE: 24
402 ggctcatctg gtctctccag                                     20
405 <210> SEQ ID NO: 25

```

FYI

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/511,415

DATE: 10/25/2004

TIME: 16:56:27

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\10252004\J511415.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date